Exercise 1 Let  $f(x) = \frac{1}{x}$ .

(a) Compute 
$$AV_{[1,2]}$$
. 
$$AV_{[1,2]} = \boxed{-\frac{1}{2}}.$$

(b) Compute  $AV_{[100,101]}$ .

$$AV_{[100,101]} = \boxed{-\frac{1}{10100}}.$$